The effects of a telephone triage intervention in a birth centre: an audit
Anna Maria Brown, Theresa Spink, Jane Urben

Maternity service provision in the UK includes midwife-led care for low-risk women, and the quality and safety of health care attracts political interest and a continuing level of public concern. Current challenges in the provision of maternity services are evident due to workforce and financial pressures (London School of Hygiene and Tropical Medicine, Royal College of Obstetricians & Gynaecologists 2016). Although evidence from the literature suggests that low-risk women would greatly benefit from midwife-led care, in terms of outcomes for both mother and baby (Birthplace in England Collaborative Group 2011, Delgado Nunes et al 2014, National Institute for Health & Clinical Excellence (NICE) 2014), financial and workforce challenges continue to impact on how maternity services can improve in the future. More recently, recommendations have been made to improve outcomes and ensure a more personalised birthing experience can be made available to every childbearing woman and her family (NHS England 2016).
Reviews of the evidence have considered the impact of midwife-led intrapartum care, particularly from the perspective of the service user (Renfrew et al 2008, Smith et al 2008) and women who plan to birth outside an obstetric unit (Birthplace in England Collaborative Group 2011, Cheyne et al 2013). Studies (Coyle et al 2001a, Morano et al 2007, Begley et al 2011, Walsh & Devane 2012) indicate that women perceive midwife-led care to offer a better childbirth experience. Cochrane reviews comparing the effectiveness of patterns of care suggest that women and babies have more beneficial outcomes when cared for by midwives in low-risk settings such as birth centres or midwifery-led units (Hodnett et al 2012, Sandall et al 2016). No significant differences were found for caesarean section and induction rates, neonatal readmissions, Apgar scores and postpartum haemorrhage. There were improved outcomes for reduced uptake of pain relief, mobility in labour, less use of Syntocinon for augmentation of labour and fewer operative deliveries. There was a reduced level of medical intervention and women experienced greater satisfaction with their care (Hodnett et al 2012). Sandall et al (2016) suggest that women who experienced midwife-led continuity of care were less likely to request epidurals or need an episiotomy or instrumental delivery.

In addition the results of the Birthplace Study, a prospective cohort study to examine perinatal and maternal outcomes by planned place of birth for healthy women with low-risk pregnancies, support home births or births in a birth centre as an option (Hollowell et al 2011). Women who plan to birth in a midwife-led unit or at home experience fewer interventions than those women who give birth in an obstetric unit. There were no differences in perinatal outcomes.

Overgaard et al (2011) and McCourt et al (2012) both found that midwives’ competency and confidence in delivering low-risk care had an impact on transfer rates of women to obstetric units and, therefore, on their delivery outcome and birth experience. Similarly Freeman et al (2006) found that the place of birth and the model of care used will affect decision making during labour and influence midwifery practice (Leap et al 2010). Esposito (1999), Coyle et al (2001a, 2001b) and Fereday et al (2009) suggest that those providing midwife-led care demonstrated a different ethos and behaviour when compared to midwives providing care in busy obstetric units. In addition, the attitude of the carer could impact on outcomes for mother and baby and result in a greater number of normal physiological births. Newburn (2012) found that women and partners perceive that a birth centre (situated alongside a labour ward) offers obstetric safety in a calm and welcoming atmosphere through engaging, restful care that is offered by midwives clearly committed to normal birth. Rogers et al (2012) indicate that this commitment needs to be nurtured in view of the findings from the Birthplace Study.

**Background**

The experience of labour and birth is an individual life event dependent on physiological and psychological processes that are influenced by social interaction and the environment of the birth place. Birth centres and hospital wards are governed by policies and criteria within the organisational context of maternity services provision. The commitment provided by midwives coupled with the support they offer depends on effective communication between a midwife and a labouring woman. Also important is the timely exchange of information and the establishment of a trusting and reciprocal relationship in which midwives are advocates for women (Fourier et al 2009). More recently Soltani et al (2015) suggested that there is a need for better dissemination of information by professionals about the options available to women for their planned place of birth. Larkin et al (2009) suggest a positive experience can be related to core attributes and related concepts of ‘support’ by midwives, organisational policies and environment, and ‘control’ of the birth experience by the women, contributing to their satisfaction and feelings of fulfilment and emotional well-being.

An Alongside Birth Centre (ABC) at one local NHS Trust was specifically designed to promote midwife-led care in an environment that supports and normalises the birth process through less intervention, continuity of carer and one-to-one care during childbirth. Women are empowered during the birth process through shared responsibility in decision making about planned place of birth and during labour and birth. The environment of the birth centre engenders a calm and home like atmosphere (Huber & Sandall 2009) and midwives champion women to achieve a physiological birth through social support and minimum intervention. It is possible that telephone triage provides more consistent support for women who are in early labour at home. Kennedy (2007) argued that triage embraces the emphasis on ‘normality’ in childbirth, improving continuity of care for women and job satisfaction for midwives.

Having reviewed the literature it was proposed that telephone triage for low-risk women in early labour was to be introduced at this hospital to improve the assessment of women’s needs and help identify any inappropriate referrals to high-risk care and delivery on the labour ward. The aim was to maximise the number of women who remain in the birth centre and achieve a normal birth.

An audit to determine the effectiveness of the telephone triage intervention was carried out over a four week period. The audit took place at an ABC at Ashford and St Peter’s NHS Foundation Trust in the south east of England and was manned by a team of Supervisors of Midwives (SoM).
Rationale

The SoM felt that the current triage process could be improved. A plan was put in place, led by the SoM’s team, for the triage phone line to be transferred to the ABC (Table 2, Figure 2). All calls received at the labour ward triage number and the ABC number would be answered by a member of the senior team.

The team selected included all the SoMs, senior midwives from the governance team and the ABC lead midwife. The time frame agreed was from 8am until 8pm for a period of four weeks from 26/01/15 to 22/02/15 (Figures 3 & 4).

Aims and objectives

The aims and objectives of the telephone triage were as follows:

• To assess the impact on clinical practice of removing the triage telephone from the busy labour ward area.
• To remove the telephone from the clinical area to allow for personal questioning to take place in a confidential environment if appropriate.
• To ensure that women were risk-assessed by phone so that they could be directed to the appropriate place for birth or review.
• To increase patient satisfaction by reducing waiting times to be seen in triage.
• To understand the types of calls received by triage and whether or not these were appropriate to be received here.

The audit findings

The SoM covered 29 days out of a 32-day period when setting up the telephone triage in the birth centre, out of which four days were not covered for the full 12 hours. One day was only covered for three hours due to reallocation of the SoM to support the high workload in the community. This day was excluded from the audit. A number of issues were highlighted in the audit:

• Inconsistencies around the daily recording of calls made data inaccurate at times, for example: number of calls in diary did not match the number of calls recorded on telephone sheets; no times on some calls; no outcome/advice given recorded on some.
• Unable to assess accurately whether waiting times in triage were reduced during this period as the labour ward staff did not always comply with the request to record time of arrival and time seen in the admission book.
• Flow through the birth centre increased during the audit. There were more women seen and more women gave birth in the ABC than in the weeks preceding and the weeks following the audit.
• Triage is being used as a labour ward holding bay at times. A number of women were triaged over the telephone and instructed to go directly to labour ward. However, on arrival, the team leader advised women to wait to be seen in triage when it was clear from the information given over the phone that admission to labour ward was required. This meant unnecessary waiting around for the women.
• On comparing the telephone logs and the triage attendance book it was found that a number of women arrived in triage without ringing first. This was inconsistent over the time frame and therefore could not be attributed to a single reason.

Feedback from staff

During the project very little feedback was provided by the triage/labour ward staff as to whether the relocation of the telephone triage made any difference to their workload or the type of care they were able to give to women. However, following the completion of the project, when the telephone was put back in the clinical area on labour ward, numerous labour ward staff members made comments on the positive difference it had made during the project. They realised that without constant interruptions from answering telephone calls, they had been able to concentrate on providing a higher quality of care.

Once the phone had been removed to an alternative area (ABC) there was no longer an issue around lack of privacy when answering phone calls. Previously triage midwives had raised concerns as they felt that they could not always ask for the detail required to make an appropriate decision. This was because there always were other women and their relatives within earshot. However, a couple of labour ward team leaders fed back that they experienced a lack of control as they did not feel that it was appropriate for a midwife not based on the labour ward to make decisions about which women could be admitted appropriately to labour ward.

Midwives in ABC initially found the telephone disruptive to the birth centre atmosphere and felt excluded from the rapport they were building with their women. However after the first week they saw the positive benefits of having a SoM on site for support with discussion and decision making around the ABC admission criteria.

The following tables present some of the findings from the audit.
Pregnancy

Table 1. Birth statistics

<table>
<thead>
<tr>
<th>Week examined</th>
<th>Deliveries in the ABC</th>
<th>Deliveries on labour ward and in theatre</th>
<th>Born before arrival</th>
</tr>
</thead>
<tbody>
<tr>
<td>29.12.14-04.01.15</td>
<td>9</td>
<td>83</td>
<td>1</td>
</tr>
<tr>
<td>05.01.15-11.01.15</td>
<td>7</td>
<td>60</td>
<td>3</td>
</tr>
<tr>
<td>12.01.15-18.01.15</td>
<td>8</td>
<td>59</td>
<td>1</td>
</tr>
<tr>
<td>19.01.15-25.01.15</td>
<td>9</td>
<td>60</td>
<td>1</td>
</tr>
<tr>
<td>26.01.15-01.02.15</td>
<td>11</td>
<td>66</td>
<td>3</td>
</tr>
<tr>
<td>02.02.15-08.02.15</td>
<td>15</td>
<td>77</td>
<td>2</td>
</tr>
<tr>
<td>09.02.15-15.02.15</td>
<td>13</td>
<td>65</td>
<td>1</td>
</tr>
<tr>
<td>16.02.15-22.02.15</td>
<td>8</td>
<td>77</td>
<td>2</td>
</tr>
<tr>
<td>23.02.15-01.03.15</td>
<td>6</td>
<td>64</td>
<td>0</td>
</tr>
</tbody>
</table>

NB: Project time frame rows are green (before and after weeks added for interest).

Figure 1. Birth statistics

Table 2. Number of women triaged in the birth centre

<table>
<thead>
<tr>
<th>Week examined</th>
<th>Women triaged</th>
<th>Women triaged multiple times</th>
</tr>
</thead>
<tbody>
<tr>
<td>29.12.14-04.01.15</td>
<td>26</td>
<td>5</td>
</tr>
<tr>
<td>05.01.15-11.01.15</td>
<td>17</td>
<td>3</td>
</tr>
<tr>
<td>12.01.15-18.01.15</td>
<td>18</td>
<td>6</td>
</tr>
<tr>
<td>19.01.15-25.01.15</td>
<td>27</td>
<td>7</td>
</tr>
<tr>
<td>26.01.15-01.02.15</td>
<td>31</td>
<td>10</td>
</tr>
<tr>
<td>02.02.15-08.02.15</td>
<td>32</td>
<td>9</td>
</tr>
<tr>
<td>09.02.15-15.02.15</td>
<td>32</td>
<td>10</td>
</tr>
<tr>
<td>16.02.15-22.02.15</td>
<td>25</td>
<td>6</td>
</tr>
<tr>
<td>23.02.15-01.03.15</td>
<td>21</td>
<td>7</td>
</tr>
</tbody>
</table>

NB: Project time frame rows are green (before and after weeks added for interest).

Figure 2. Number of women triaged in the birth centre
Figure 3. Calls to triage during the audit period. Total number of calls (grouped into time frame)

Figure 4. Calls to triage during the audit period. Average number of calls (grouped into time frame)

Figure 5. Reasons for calls to triage

Table 3. Reasons for calls to triage

<table>
<thead>
<tr>
<th>Week examined</th>
<th>Number of calls that were labour related enquiries</th>
<th>Number of calls that were general pregnancy enquiries</th>
<th>Number of calls related to reduced fetal movements</th>
<th>Number of calls related to antepartum haemorrhage/bleeding/red loss</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>26.01.15–1.02.15</td>
<td>27</td>
<td>52</td>
<td>21</td>
<td>16</td>
<td>41</td>
</tr>
<tr>
<td>02.02.15–08.02.15 (Excluding data from 07.02.15)</td>
<td>51</td>
<td>40</td>
<td>24</td>
<td>15</td>
<td>22</td>
</tr>
<tr>
<td>09.02.15–15.02.15 (Excluding data from 13.02.15 and 15.02.15)</td>
<td>41</td>
<td>48</td>
<td>14</td>
<td>9</td>
<td>23</td>
</tr>
<tr>
<td>16.02.15–22.02.15 (Except data from 21.02.15)</td>
<td>48</td>
<td>35</td>
<td>22</td>
<td>0</td>
<td>23</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>167</strong></td>
<td><strong>175</strong></td>
<td><strong>81</strong></td>
<td><strong>40</strong></td>
<td><strong>109</strong></td>
</tr>
</tbody>
</table>
Summary of findings

The most interesting finding from the audit was that there was an increase in the numbers of women birthing in the ABC (Table 1, Figure 1). If it was unclear whether the woman who was calling triage was suitable for the ABC, the SoM was able to review notes and signpost the woman to the appropriate place for birth on admission (Table 3, Figure 3). In addition, there were no privacy issues during the project as the calls were answered in the quiet environment of the birth centre.

A high percentage of calls for general pregnancy enquiries were received, many of which may have been more appropriately addressed at the antenatal visit or via a telephone conversation with their named midwife. As a result the women who were calling were only advised to attend triage if thought to require review or assessment. Women who were required to be seen elsewhere were directed to the appropriate place eg day assessment unit, GP, community midwife.

Recommendations

A number of recommendations have resulted from the audit to maximise normal birth in this maternity unit by increasing use of the alongside midwife-led birth centre for all low-risk women. It was found that phone calls taken in the busy labour ward environment do not allow for personal and private questioning to take place. Permanently moving the phone to an area where this could take place, such as the birth centre, would be of benefit to both staff and women.

The concept and outcomes of a dedicated telephone triage system needs to be explored further with current labour ward staff. Through this intervention women are directed to the appropriate place most suited to their needs. It was suggested that women would be given the mobile numbers of their named midwives in order to provide a route for general pregnancy related enquiries. In addition, a senior midwife (band 6 or above) was to be allocated to triage on every shift.

Conclusion

The SoM’s team agreed that the way forward would be to move the triage telephone to ABC on a permanent basis. This would provide a more effective service for the women both on the telephone and within the clinical area. The team acknowledged that within current budget limitations and the high level of midwives on maternity leave (22), changing the current system over the summer period would prove difficult. It was therefore proposed that the changes would take place from September 2016. Once this had occurred a further audit would evaluate its effectiveness in the long-term period. Currently a number of staff members led by the SoM are in the process of planning the pathway to take the project forward from September of this year.

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References


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